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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,054	04/08/2004	Susan E. Eisen	AUS920031069US1	9646
7590	12/15/2006		EXAMINER	
Kelly K. Kordzik P.O. Box 50784 Dallas, TX 75201			LAI, VINCENT	
			ART UNIT	PAPER NUMBER
			2181	
DATE MAILED: 12/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/821,054	Applicant(s) EISEN ET AL.	
	Examiner Vincent Lai	Art Unit 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
FRITZ FLEMING  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100  
09/12/2006

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-415)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 8 April 2004 was considered by the examiner.

### ***Response to Amendment***

2. Acknowledgment is made of the amendments to the claims and title.
3. Objections to the claims and title are withdrawn after considering amendments

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-3 and 21 have been considered but are moot in view of the new ground(s) of rejection.
5. Applicant's arguments, see Remarks, filed 9 September 2006, with respect to claim 6, and subsequently claims 13 and 15, and claim 22, and subsequently claims 29 and 31, have been fully considered and are persuasive. The 35 USC 103 rejection of claims 6, 13, 15, 22, 29, and 31 has been withdrawn. The Applicant has convinced Examiner that subject matter directed to claims 6, 13, 15, 22, 29, and 31 do indeed overcome the rejections. The Examiner also could not find further teachings that read upon the limitations of the claims.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-20 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 is directed to non-statutory subject matter as the manner in which the limitations are claimed can lend itself to read upon more than what the Specification details the "completion table" really is. The claims, as is, can read upon a piece of paper containing a table. No structure is claimed and there is no language pertaining to the completion table being a computer component within a processor as stipulated in the Specification.

Claim 1 is further directed to non-statutory subject matter as the embodiments of the claim read on data that is not claimed to be computer program or computer program product that is stored on a computer readable medium.

Claims 2-5 are rejected as being dependent on claim 1.

Claim 6 is also directed to non-statutory subject matter as the last step of the method claimed is a calculation, which is not considered a real or tangible end result.

The data calculated must be used or stored for the claim to be considered to have a real or tangible result.

Claims 7-20 are rejected as being dependent on claim 6.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1-3 and 21 are rejected under 35 U.S.C. 102(a) as being anticipated by Kahle et al (US Pat. No. 6,654,869), herein referred to as Kahle.

As per **claim 1**, Kahle discloses a completion table (See figure 1: Completion table 118), comprising:

a plurality of entries (See figure 3: Entry 302a-n), wherein each of said plurality of entries tracks a consecutive number of outstanding instructions (See figure 4: Group organization is used and order is kept), wherein each of said plurality of entries is configured to store an instruction address of a first of said consecutive number of outstanding instructions (See figure 3: Instruction address 304) and an identification of said first of said consecutive number of outstanding instructions (See figure 3: GTAG 308).

As per **claim 2**, Kahle discloses the completion table as recited in claim 1, wherein said consecutive number of outstanding instructions comprises a length of a cache line (See figure 4: There is a grouping of instructions that are saved in the completion table like a cache line).

As per **claim 3**, Kahle discloses the completion table as recited in claim 1, wherein said instruction address is an effective address (See column 5, lines 50-52 and column 5, line 66- column 6, line 1: The instruction address in the instruction address slot is already an effective address as it is no longer simply an address within an instruction).

As per **claim 21**, Kahle discloses a processor (See figure 1: Processor 100), comprising:

an instruction fetch unit configured to fetch instructions (See figure 1: Fetch unit 102);

an instruction dispatch unit coupled to said instruction fetch unit, wherein said instruction fetch unit is further configured to issue said fetched instructions to said instruction dispatch unit, wherein said instruction dispatch unit comprises an instruction queue configured to store said fetched instructions (See figure 1: Dispatch unit 114 and an instruction cache is used);

a first and a second execution unit (See figure 1: Execution pipelines 122) coupled to said instruction dispatch unit, wherein said dispatch unit is configured to dispatch said stored fetched instructions to said first and said second execution unit (See figure 1); and

a completion unit coupled to said instruction fetch unit (See figure 1: Completion table 118), wherein said instruction fetch unit is further configured to issue an instruction address and an identification of each of said fetched instructions to said completion unit, wherein said completion unit is configured to keep track of when said fetched instructions have been completed (See figure 3 and 4 and column 5, lines 40-43), wherein said completion unit comprises:

a completion table (See figure 3), wherein said completion table comprises a plurality of entries (See figure 3: Entry 302a-n), wherein each of said plurality of entries tracks a consecutive number of outstanding instructions (See figure 4: Group organization is used and order is kept), wherein each of said plurality of entries is configured to store an instruction address of a first of said consecutive number of outstanding instructions (See figure 3: Instruction address 304) and an identification of said first of said consecutive number of outstanding instructions (See figure 3: GTAG 308).

***Allowable Subject Matter***

8. **Claims 4-5 and 22-36** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
9. **Claims 6-20** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Lai whose telephone number is (571) 272-6749. The examiner can normally be reached on M-F 8:00-5:30 (First BiWeek Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fritz M. Fleming can be reached on (571) 272-4145. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

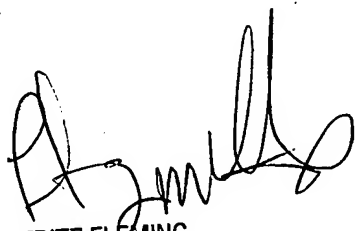


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vincent Lai  
Examiner  
Art Unit 2181

vi  
December 10, 2006

  
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